

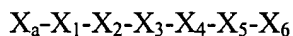
**AMENDMENTS TO THE CLAIMS**

Please amend the claims 4, 5, 6, 11, 12, and 13 as follows:

1. **(Canceled)**

2. **(Canceled)**

3. **(Previously Presented)** An anti-inflammatory compound comprising the following structure:



wherein

$X_a$  is a membrane translocation domain comprising from 6 to 15 amino acid residues;

$X_1$  is L, A, I or nor-leucine (Nle);

$X_2$  is D, E, N, Q, homoserine (Hser) or 2-ketopropylalanine (2-ketopropyl-A);

$X_3$  is W, F Y, 4-biphenyl-alanine (Bpa), homophenylalanine (Hphe), 2-Naphthylalanine (2-Nal), 1-Naphthylalanine (1-Nal), or cyclohexyl-alanine (Cha);

$X_4$  is S, A, E, L, T, nor-leucine (Nle), or homoserine (Hser);

$X_5$  is W, H, homophenylalanine (Hphe), 2-Naphthylalanine (2-Nal), 1-Naphthylalanine (1-Nal), O-benzyl serine (SeroBn), or 3-Pyridylalanine (3-Pal); and

$X_6$  is L, A, I, or nor-leucine (Nle).

4. **(Currently Amended)** The anti-inflammatory compound of claim 3, ~~[further comprising]~~ wherein  $X_a$  is the amino acid sequence TA.

5. **(Currently Amended)** The anti-inflammatory compound of claim 3, further comprising the variable  $X_7$ , wherein  $X_7$  is the amino acid sequence QTE.

6. **(Currently Amended)** The anti-inflammatory compound of claim 3, wherein said compound comprises a sequence selected from the group consisting of TALDWSWLQTE (SEQ ID NO:28), LDWSWLQTE (SEQ ID NO:29), TALDWSWL (SEQ ID NO:30), ALDWSWLQTE (SEQ ID NO:31), LDWSWLQTE (SEQ ID NO:32), LDWSWL (SEQ ID NO:33), TALDWSWLQT (SEQ ID NO:34), TALDWSWLQ (SEQ ID NO:35), ALDWSWLQT (SEQ ID NO:36), LDWSWLQ (SEQ ID NO:37), LDWSWLQT (SEQ ID NO:38), ADWSWL (SEQ ID NO:39), LDWSWA (SEQ ID NO:40), ADWSWA (SEQ

ID NO:41).,[;] LDFSWL (SEQ ID NO:42).,[;] LDYSWL (SEQ ID NO:43).,[;] LDWAWL (SEQ ID NO:44).,[;] LDWEWL (SEQ ID NO:45).,[;] TAADWSWLQTE (SEQ ID NO:46).,[;] ADWSWLQTE (SEQ ID NO:47).,[;] TAADWSWL (SEQ ID NO:48).,[;] AADWSWLQTE (SEQ ID NO:49).,[;] ADWSWLQTE (SEQ ID NO:50).,[;] ADWSWL (SEQ ID NO:51).,[;] TAADWSWLQT (SEQ ID NO:52).,[;] TAADWSWLQ (SEQ ID NO:53).,[;] AADWSWLQT (SEQ ID NO:54).,[;] ADWSWLQ (SEQ ID NO:55).,[;] ADWSWLQT (SEQ ID NO:56).,[;] ALDWSWAQTE (SEQ ID NO:57).,[;] LDWSWAQTE (SEQ ID NO:58).,[;] TALDWSWA (SEQ ID NO:59).,[;] ALDWSWAQTE (SEQ ID NO:60).,[;] LDWSWAQTE (SEQ ID NO:61).,[;] LDWSWA (SEQ ID NO:62).,[;] TALDWSWAQT (SEQ ID NO:63).,[;] TALDWSWAQ (SEQ ID NO:64).,[;] ALDWSWAQT (SEQ ID NO:65).,[;] LDWSWAQ (SEQ ID NO:66).,[;] LDWSWAQT (SEQ ID NO:67).,[;] TAADWSWAQTE (SEQ ID NO:68).,[;] ADWSWAQTE (SEQ ID NO:69).,[;] TAADWSWA (SEQ ID NO:70).,[;] AADWSWAQTE (SEQ ID NO:71).,[;] ADWSWAQTE (SEQ ID NO:72).,[;] ADWSWA (SEQ ID NO:73).,[;] TAADWSWAQT (SEQ ID NO:74).,[;] TAADWSWAQ (SEQ ID NO:75).,[;] AADWSWAQT (SEQ ID NO:76).,[;] ADWSWAQ (SEQ ID NO:77).,[;] ADWSWAQT (SEQ ID NO:78).,[;] TALDFSWLQTE (SEQ ID NO:79).,[;] LDFSWLQTE (SEQ ID NO:80).,[;] TALDFSWL (SEQ ID NO:81).,[;] ALDFSWLQTE (SEQ ID NO:82).,[;] LDFSWLQTE (SEQ ID NO:83).,[;] LDFSWL (SEQ ID NO:84).,[;] TALDFSWLQT (SEQ ID NO:85).,[;] TALDFSWLQ (SEQ ID NO:86).,[;] ALDFSWLQT (SEQ ID NO:87).,[;] LDFSWLQ (SEQ ID NO:88).,[;] LDFSWLQT (SEQ ID NO:89).,[;] TALDYSWLQTE (SEQ ID NO:90).,[;] LDYSWLQTE (SEQ ID NO:91).,[;] TALDYSWL (SEQ ID NO:92).,[;] ALDYSWLQTE (SEQ ID NO:93).,[;] LDYSWLQTE (SEQ ID NO:94).,[;] LDYSWL (SEQ ID NO:95).,[;] TALDYSWLQT (SEQ ID NO:96).,[;] TALDYSWLQ (SEQ ID NO:97).,[;] ALDYSWLQT (SEQ ID NO:98).,[;] LDYSWLQ (SEQ ID NO:99).,[;] LDYSWLQT (SEQ ID NO:100).,[;] TALDWAWLQTE (SEQ ID NO:101).,[;] LDWAWLQTE (SEQ ID NO:102).,[;] TALDWAWL (SEQ ID NO:103).,[;] ALDWAWLQTE (SEQ ID NO:104).,[;] LDWAWLQTE (SEQ ID NO:105).,[;] LDWAWL (SEQ ID NO:106).,[;] TALDWAWLQT (SEQ ID NO:107).,[;] TALDWAWLQ (SEQ ID NO:108).,[;] ALDWAWLQT (SEQ ID NO:109).,[;] LDWAWLQ (SEQ ID NO:110).,[;] LDWAWLQT (SEQ ID NO:111).,[;] TALDWEWLQTE (SEQ ID NO:112).,[;] LDWEWLQTE (SEQ ID NO:113).,[;] TALDWEWL (SEQ ID NO:114).,[;] ALDWEWLQTE (SEQ ID NO:115).,[;] LDWEWLQTE (SEQ ID NO:116).,[;] LDWEWL (SEQ ID NO:117).,[;] TALDWEWLQT (SEQ ID NO:118).,[;] TALDWEWLQ (SEQ ID NO:119).,[;] ALDWEWLQT (SEQ ID NO:120).,[;] LDWEWLQ (SEQ ID NO:121).,[;] and LDWEWLQT (SEQ ID NO:122).

7. **(Previously Presented)** The anti-inflammatory compound of claim 3, wherein X<sub>a</sub> consists of 6-12 amino acid residues.

8. **(Previously Presented)** The anti-inflammatory compound of claim 3, wherein X<sub>a</sub> consists of 6-10 amino acid residues.

9. **(Previously Presented)** The anti-inflammatory compound of claim 3, wherein X<sub>a</sub> comprises at least five basic amino acid residues.

10. **(Previously Presented)** The anti-inflammatory compound of claim 7, wherein X<sub>a</sub> comprises at least five amino acid residues independently selected from L-arginine, D-arginine, L-lysine and D-lysine.

11. **(Currently Amended)** The anti-inflammatory compound of claim 3, wherein X<sub>a</sub> is selected from the group consisting of RRMKWKK (SEQ ID NO:123),<sub>[;]</sub> YGRKKRRQRRR (SEQ ID NO:124),<sub>[;]</sub> ygrkkrrqrrr (SEQ ID NO:125),<sub>[;]</sub> YARKARRQARR (SEQ ID NO:126),<sub>[;]</sub> yarkarrqarr (SEQ ID NO:127),<sub>[;]</sub> YARAARRAARR (SEQ ID NO:128),<sub>[;]</sub> yaraarraarr (SEQ ID NO:129),<sub>[;]</sub> rrmkwkk (SEQ ID NO:130),<sub>[;]</sub> RRRRRR (SEQ ID NO:149), RRRRRRR (SEQ ID NO:150), RRRRRRRR (SEQ ID NO:151), RRRRRRRRR (SEQ ID NO:152), RRRRRRRRRR (SEQ ID NO:153), RRRRRRRRRR (SEQ ID NO:154), rrrrrr (SEQ ID NO:155), rrrrrr (SEQ ID NO:156), rrrrrr (SEQ ID NO:157), rrrrrrr (SEQ ID NO:158), rrrrrrrr (SEQ ID NO:159), and rrrrrrrrr (SEQ ID NO:160).

12. **(Currently Amended)** An anti-inflammatory compound comprising an amino acid sequence selected from the group consisting of <sub>[;]</sub> RRMKWKKTALDWSWLQTE (SEQ ID NO:131),<sub>[;]</sub> rrmkwkkTALDWSWLQTE (SEQ ID NO:132),<sub>[;]</sub> YGRKKRRQRRRTALDWSWLQTE (SEQ ID NO:133),<sub>[;]</sub> ygrkkrrqrrrTALDWSWLQTE (SEQ ID NO:134),<sub>[;]</sub> rrrrrrTALDWSWLQTE (SEQ ID NO:135),<sub>[;]</sub> RRRRRRRRTALDWSWLQTE (SEQ ID NO:136),<sub>[;]</sub> YARKARRQARRTALDWSWLQTE (SEQ ID NO:137),<sub>[;]</sub> yarkarrqarrTALDWSWLQTE (SEQ ID NO:138),<sub>[;]</sub> YARAARRAARRTALDWSWLQTE (SEQ ID NO:139),<sub>[;]</sub> yaraarraarrTALDWSWLQTE (SEQ ID NO:140),<sub>[;]</sub> YGRKKRRQRRRLDWSWL (SEQ ID NO:141),<sub>[;]</sub> ygrkkrrqrrrLDWSWL (SEQ ID NO:142),<sub>[;]</sub> RRMKWKKLDWSWL (SEQ ID NO:143),<sub>[;]</sub> rrmkwkkLDWSWL (SEQ ID NO:144),<sub>[;]</sub> rrrrrrLDWSWL (SEQ ID NO:145),<sub>[;]</sub> YARAARRAARRLDWSWL (SEQ ID NO:146),<sub>[;]</sub> yaraarraarrLDWSWL (SEQ ID NO:147),<sub>[;]</sub> and RRRRRRRRLDWSWL (SEQ ID NO:148).

13. **(Currently Amended)** An anti-inflammatory compound [having a structure] comprising an amino acid sequence selected from the group consisting of [:]

H-RRMKWKKTALDWSWLQTE-NH<sub>2</sub> (SEQ ID NO: 161);

H-YGRKKRRQRRRTALDWSWLQTE-NH<sub>2</sub> (SEQ ID NO: 162);

H-rrrrrrrTALDWSWLQTE-NH<sub>2</sub> (SEQ ID NO: 163);

H-YARKARRQARRTALDWSWLQTE-NH<sub>2</sub> (SEQ ID NO: 164);

H-YARAARRAARRTALDWSWLQTE-NH<sub>2</sub> (SEQ ID NO: 165);

H-RRMKWKKLDWSWL-NH<sub>2</sub> (SEQ ID NO: 166);

H-rrmkwkkLDWSWL-NH<sub>2</sub> (SEQ ID NO: 167);

H-rrrrrrrLDWSWL-NH<sub>2</sub> (SEQ ID NO: 168);

H-YARAARRAARRLDWSWL-NH<sub>2</sub> (SEQ ID NO: 169);

H-yaraarraarrLDWSWL-NH<sub>2</sub> (SEQ ID NO: 170); and

H-YGRKKRRQRRRLDWSWL- NH<sub>2</sub> (SEQ ID NO: 171).